



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT9D-7R4H1 BYPASS RATIO: 4.8
 UNIQUE ID NUMBER: 1PW030 PRESSURE RATIO (π_{co}): 26.7
 COMBUSTOR:
 ENGINE TYPE: TF RATED THRUST (F_{oo}) (kN): 249.1

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F _{oo} (g/kN) or SN	3.0	21.7	68.2	8.4
AS % OF ORIGINAL LIMIT	15.5	18.4	73.0	45.4
AS % OF CAEP/2 LIMIT (NO _x)			91.2	
AS % OF CAEP/4 LIMIT (NO _x)			110.4	
AS % OF CAEP/6 LIMIT (NO _x)			125.5	
AS % OF CAEP/8 LIMIT (NO _x)			150.0	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES
 x DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F _{oo})	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	2.512	0.15	0.74	45.20	7.6
CLIMB OUT	85	2.2	1.999	0.14	0.63	30.00	
APPROACH	30	4.0	0.723	0.18	1.39	8.90	
IDLE	7	26.0	0.245	1.48	11.63	3.80	
LTO TOTAL FUEL (kg) or EMISSIONS (g)			926	651	4938	15683	-
NUMBER OF ENGINES				5	5	5	3
NUMBER OF TESTS				6	6	6	3
AVERAGE D _p /F _{oo} (g/kN) or AVERAGE SN (MAX)				2.7	20.4	65.2	7.6
SIGMA (D _p /F _{oo} in g/kN, or SN)							
RANGE (D _p /F _{oo} in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	
TEMPERATURE (K)	271-299
ABS HUMIDITY (kg/kg)	

FUEL

SPEC	Jet A
H/C	
AROM (%)	

MANUFACTURER: Pratt & Whitney
 TEST ORGANIZATION: P&WA
 TEST LOCATION: East Hartford, CT
 TEST DATES: 26/10/1981-10/09/1983

REMARKS

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)